

CLAIMS

What is claimed is:

1. A digital recording/reproducing apparatus comprising:
a first data storage medium with a timeshift function; and
a controller, recording received compressed data on both the first data storage medium and a second data storage medium without the timeshift function if a recording command that requires data to be recorded on the second data storage medium is received, and reading data recorded on the first data storage medium for data reproduction if a reproduction command for data being recorded is received.
2. The digital recording/reproducing apparatus of claim 1, further comprising a data encoder compressing the data and outputting the compressed data to the controller, wherein a recording bit rate of the second data storage medium is required to be smaller than a predetermined value or within a predetermined range, the data encoder controls a generation amount of data according to a control of the controller so that the requirement is satisfied.
3. The digital recording/reproducing apparatus of claim 1, wherein if the compressed data is completely recorded on the second data storage medium, the controller deletes the same compressed data recorded on the first data storage medium.
4. The digital recording/reproducing apparatus of claim 1, wherein the first data storage medium is a hard disk.
5. The digital recording/reproducing apparatus of claim 1, wherein the second data storage medium is an optical recording medium.
6. The digital recording/reproducing apparatus of claim 5, wherein the optical recording medium is a removable data storage medium.
7. The digital recording/reproducing apparatus of claim 4, wherein the second data storage medium is an optical recording medium.

8. The digital recording/reproducing apparatus of claim 7, wherein the optical recording medium is a removable data storage medium.

9. The digital recording/reproducing apparatus of claim 1, wherein the data is video data.

10. A digital recording/reproducing apparatus comprising:
a first data storage medium with a timeshift function; and
a controller, which if a recording command that requires data to be recorded on a second data storage medium without a timeshift function is received, records received compressed data on the first data storage medium, begins to read the compressed data recorded on the first data storage medium if a predetermined amount of compressed data is recorded on the first data storage medium, and records the read data on the second data storage medium, and if a reproduction command for data being recorded is received, reads data recorded on the first data storage medium for data reproduction.

11. The digital recording/reproducing apparatus of claim 10, further comprising a data encoder compressing the data and outputting the compressed data to the controller, wherein a recording bit rate of the second data storage medium is required to be smaller than a predetermined value or within a predetermined range, the controller compares an amount of data recorded on the first data storage medium with the amount of data recorded on the second data storage medium, and controls the data encoder so that the recording bit rate of the second data storage medium is smaller than the predetermined value or within the predetermined range, to thereby adjust a generation amount of data of the data encoder.

12. The digital recording/reproducing apparatus of claim 10, wherein if the compressed data is completely recorded on the second data storage medium, the controller deletes the same compressed data recorded on the first data storage medium.

13. The digital recording/reproducing apparatus of claim 10, wherein the first data storage medium is a hard disk.

14. The digital recording/reproducing apparatus of claim 10, wherein the second data storage medium is an optical recording medium.

15. The digital recording/reproducing apparatus of claim 14, wherein the optical recording medium is a removable data storage medium.

16. The digital recording/reproducing apparatus of claim 13, wherein the second data storage medium is an optical recording medium.

17. The digital recording/reproducing apparatus of claim 16, wherein the optical recording medium is a removable data storage medium.

18. The digital recording/reproducing apparatus of claim 10, wherein the data is video data.

19. A digital recording/reproducing method comprising:
receiving a recording command that requires data to be recorded on a second data storage medium without a timeshift function;
compressing received data and generating compressed data;
recording the compressed data on both a first data storage medium with the timeshift function and the second data storage medium; and
if a reproduction command for data being recorded is received, reading data recorded on the first data storage medium for data reproduction.

20. The digital recording/reproducing method of claim 19, wherein a recording bit rate of the second data storage medium is required to be smaller than a predetermined value or within a predetermined range, satisfying the requirement by controlling a generation amount of data by compressing received data and generating compressed data.

21. The digital recording/reproducing method of claim 19, further comprising deleting the same compressed data recorded on the first data storage medium if the compressed data is completely recorded on the second data storage medium.

22. The digital recording/reproducing method of claim 19, further comprising using a hard disk as the first data storage medium.

23. The digital recording/reproducing method of claim 19, further comprising using an optical recording medium as the second data storage medium.

24. The digital recording/reproducing method of claim 23, wherein the optical recording medium is a removable data storage medium.

25. The digital recording/reproducing method of claim 22, further comprising using an optical recording medium as the second data storage medium.

26. The digital recording/reproducing method of claim 25, wherein the optical recording medium is a removable data storage medium.

27. The digital recording/reproducing method of claim 19, further comprising using video data as the data.

28. A digital recording/reproducing method comprising:
receiving a data recording command that requires data to be recorded on a second data storage medium without a timeshift function;
compressing received data and generating compressed data;
recording the compressed data on a first data storage medium with the timeshift function;

if a predetermined amount of compressed data is recorded on the first data storage medium, reading the compressed data recorded on the first data storage medium and recording the read data on the second data storage medium; and

if receiving a reproduction command for data being recorded, reading data recorded on the first data storage medium for data reproduction.

29. The digital recording/reproducing method of claim 28, wherein if a recording bit rate of the second data storage medium is required to be smaller than a predetermined value or within a predetermined range, the method further comprises:

comparing an amount of data recorded on the first data storage medium with that recorded on the second data storage medium ; and

adjusting a generation amount of compressed data so that the recording bit rate of the second data storage medium is smaller than the predetermined value or within the predetermined range.

30. The digital recording/reproducing method of claim 28, further comprising deleting the same compressed data recorded on the first data storage medium if the compressed data is completely recorded on the second data storage medium.

31. The digital recording/reproducing method of claim 28, further comprising using a hard disk as the first data storage medium.

32. The digital recording/reproducing method of claim 28, further comprising using an optical recording medium as the second data storage medium.

33. The digital recording/reproducing method of claim 32, wherein the optical recording medium is a removable data storage medium.

34. The digital recording/reproducing method of claim 31, further comprising using an optical recording medium as the second data storage medium.

35. The digital recording/reproducing method of claim 34, wherein the optical recording medium is a removable data storage medium.

36. The digital recording/reproducing method of claim 28, further comprising using video data as the data.